



CLEARING THE AIR

2019 APCD Workshop Series

Are you curious about the air you breathe, what's in it, and how it's protected?

Join us at our free monthly workshops and get an in-depth look at how we keep the air clean.

FEBRUARY 18	JULY 15
MARCH 18	AUGUST 19
APRIL 15	SEPTEMBER 16
MAY 20	OCTOBER 21
JUNE 17	NOVEMBER 18

6 p.m-7:30 p.m. | Louisville Free Public Library, 301 York St.

For more info, go to www.louisvilleky.gov/APCD
(502) 574-6000

CLEARING THE AIR

2019 APCD Workshop Series



The [APCD Workshop Series](#) seeks to:

- Increase the community's understanding of Louisville's air and of APCD's many functions
- **EMPOWER** citizens
- Provide a more informal forum for dialogue, Q&A and feedback
- Continue with community engagement efforts

CLEARING THE AIR

2019 APCD Workshop Series



Today's workshop seeks to:


1. Discuss the history of land use development in Louisville Metro.
2. Help the community better understand the relationship between land use development and air quality.
3. Highlight public participation opportunities throughout the land use planning and regulation process.

CLEARING THE AIR

2019 APCD Workshop Series



Remember...

- There are **NO** silly questions
- Public Participation = 
- Interactive/informal workshop
 - Ask questions as they come to mind
 - Feedback? Email Clearingtheair@louisvilleky.gov





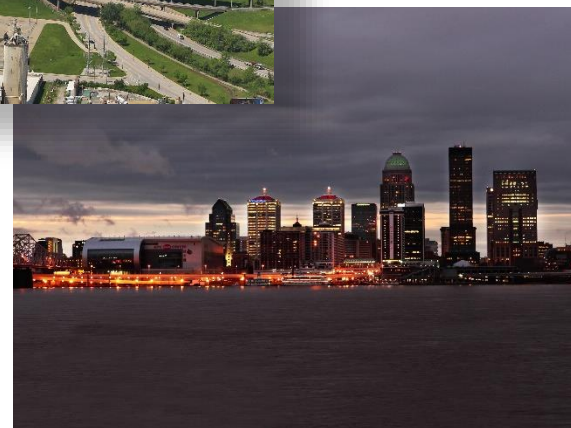
Land Use Planning & Air Quality

Air Pollution Control District
09/16/2019



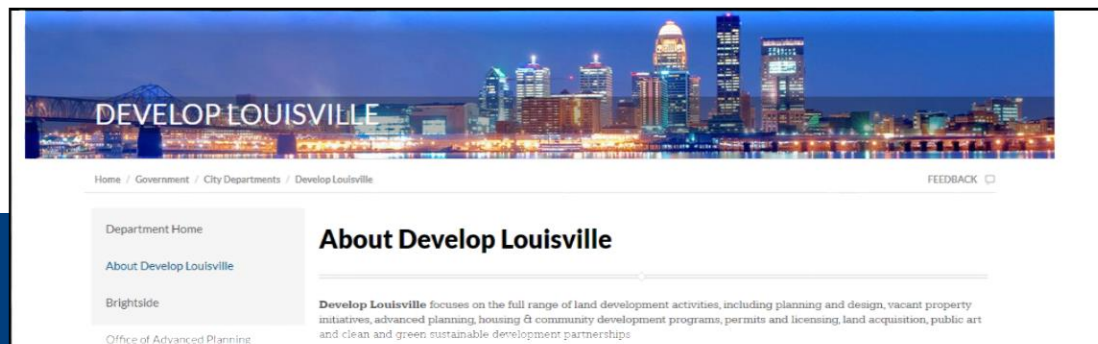
Overview

- **Land Use in Louisville**
- Air Quality and Land Use Development
- Improving Louisville's Air Quality



Develop Louisville

- Focuses on the full range of land development activities throughout Metro Louisville
- Houses the following Metro entities:
 - Office of Advanced Planning and Sustainability
 - Brightside
 - Office of Housing and Community Development
 - Planning and Design Services
 - Office of Vacant and Public Property Administration



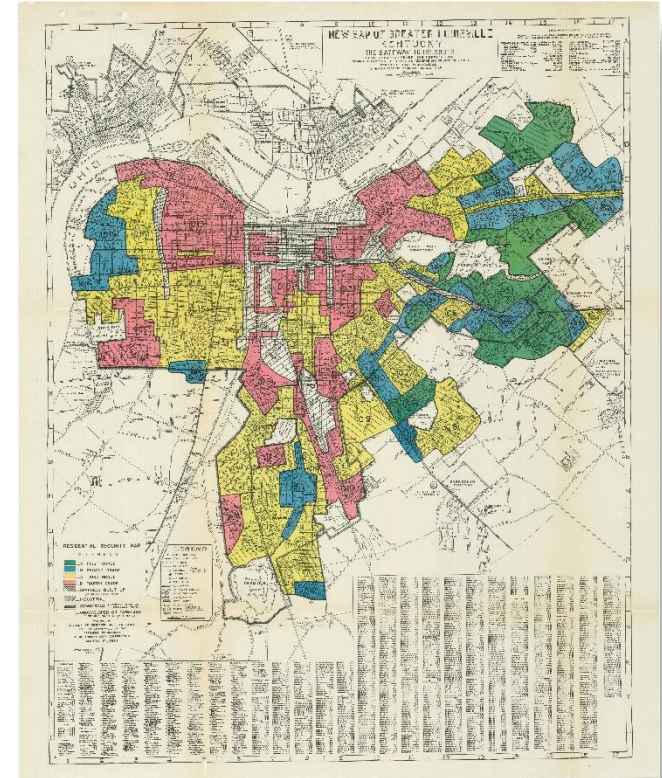
Office of Advanced Planning and Sustainability

- Envisions, designs and implements long-range planning solutions to create a vibrant, sustainable community
- Carries out strategic, long-term and short-term planning initiatives focused on neighborhoods, multi-modal corridors brownfields and public art



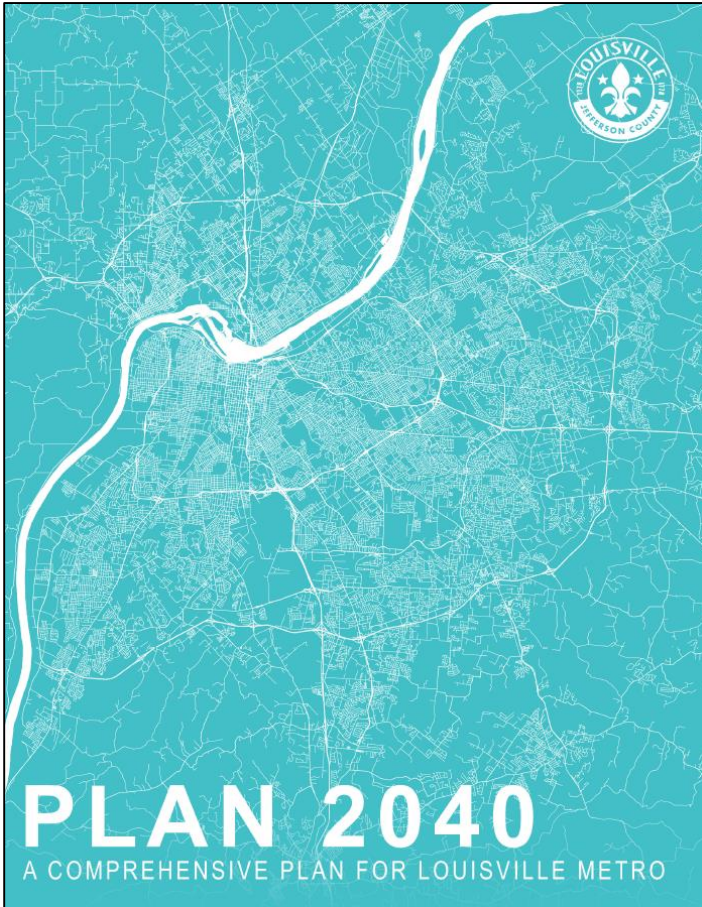
Land Use in Louisville

- What has contributed to land use and development in Louisville?
 - Redlining
 - Practice of denying loans to certain neighborhoods because of socioeconomic characteristics rather than physical design or structural characteristics
 - Land Development
 - Transportation Planning



1937 Redlining Map of Louisville, KY

Plan 2040



Vision Statement:

In 2040, Louisville Metro is a vibrant and diverse community that is connected, healthy, authentic, sustainable and equitable, with compassionate citizens and memorable places among its greatest assets and where all people can achieve their full potential.

Plan 2040

- Community Form

- Encourages sustainable growth and density around mixed-use centers and corridors.
 - Centers and corridors, promoted for investment
 - Encourage diverse land uses
 - Incentivize higher density development
 - Safe mobility options strengthen connectivity around centers and corridors.



Plan 2040

- Community Form (cont'd)
 - Enhance neighborhoods by protecting and integrating open space, watersheds and other natural resources.
 - Diminish environmental impacts of development
 - Preserve, protect and/or enhance environmentally sensitive areas
 - Integrate open spaces are integrated into development, where appropriate
 - A built environment with connections to parks, recreation and natural resources



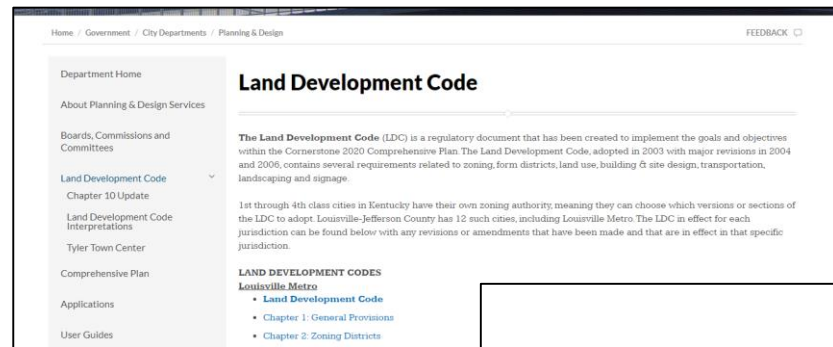
Plan 2040

- Other elements:
 - Alternative transportation that is safe, accessible, and efficient
 - Transit-oriented development
 - Integrate sustainability and resilience in community planning processes

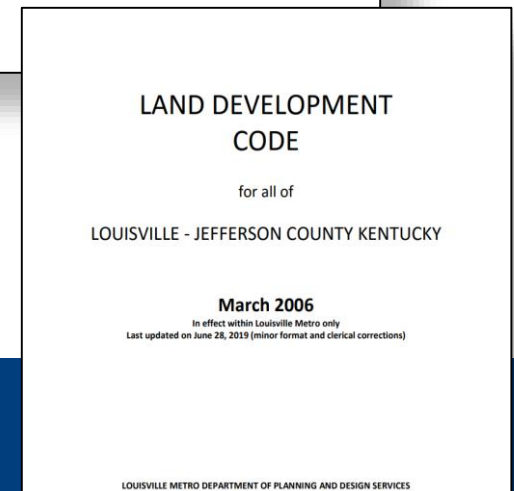


Land Development Code

- Regulatory document created to implement the goals and objectives outlined in the Plan 2040
- Contains several requirements related to the following*:
 - Land use
 - Transportation
 - Zoning
 - Building and site design



**Not an exhaustive list*



Move Louisville

- Goals

- Provide connectivity choices
- Assure environmental sustainability

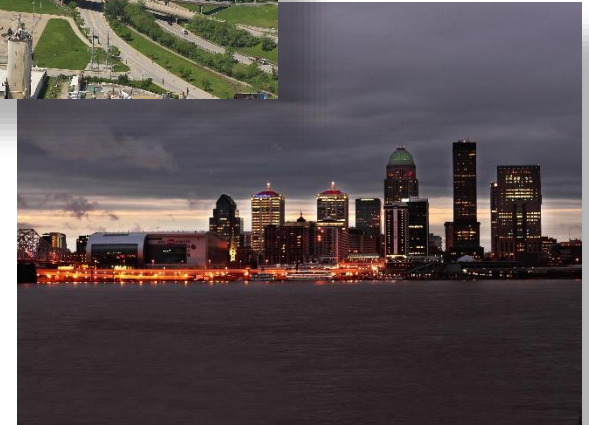
- Priority Projects:

- Premium transit corridors
- Complete streets
- Regional economic development projects
- Downtown/edge neighborhood access
- Bicycle/pedestrian network



Overview

- Land Use in Louisville
- **Air Quality and Land Use Development**
- Improving Louisville's Air Quality



National Ambient Air Quality Standards (NAAQS)

- The Clean Air Act requires EPA to set NAAQS (40 CFR part 50)
- EPA sets NAAQS for **six principal pollutants**, which are called “**criteria**” air pollutants:
 - Carbon Monoxide
 - Lead
 - Particulate Matter
 - Oxides of Nitrogen
 - Sulfur Dioxide
 - Ozone

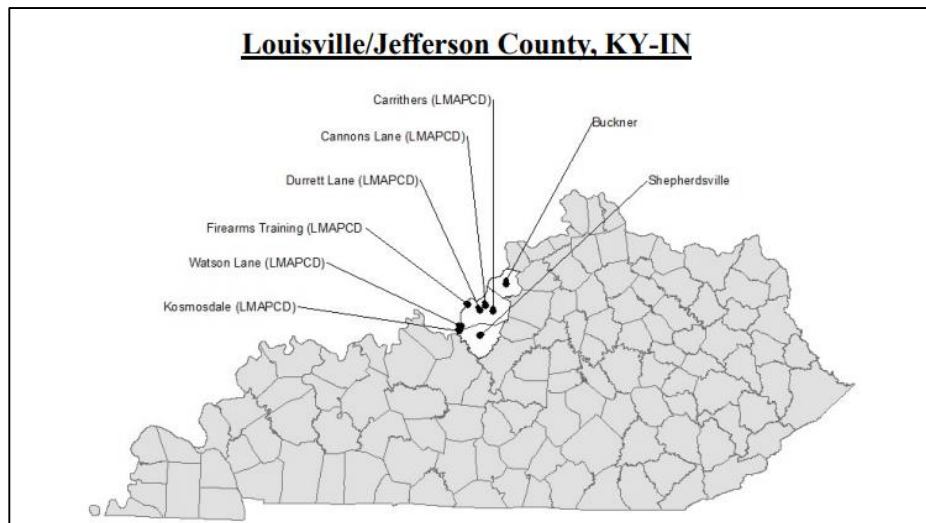


Current NAAQS Status

Pollutant	Standard	Averaging Time	Attainment Status
Carbon Monoxide	9 ppm	8-hour	Attainment
	35 ppm	1-hour	Attainment
Lead	0.15 $\mu\text{g}/\text{m}^3$	Rolling 3-month Average	Attainment
Nitrogen Dioxide	53 ppb	Annual Average	Attainment
	100 ppb	1-hour	Attainment
Particulate Matter (PM10)	150 $\mu\text{g}/\text{m}^3$	24-hour	Attainment
Particulate Matter (PM2.5)	12.0 $\mu\text{g}/\text{m}^3$	Annual Average	Attainment
	35 $\mu\text{g}/\text{m}^3$	24-hour	Attainment
Ozone	0.070 ppm	8-hour	Nonattainment
Sulfur Dioxide	75 ppb	1-hour	Partial County Nonattainment

Air Toxics in Louisville

- Pollutants that cause or may cause cancer or other serious health effects
- Included in APCD's air monitoring network



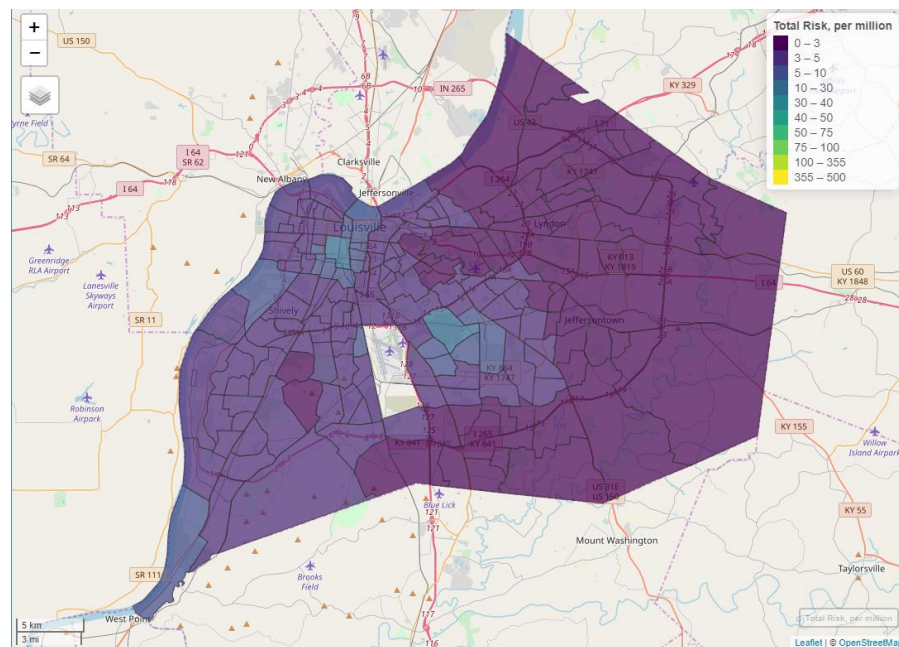
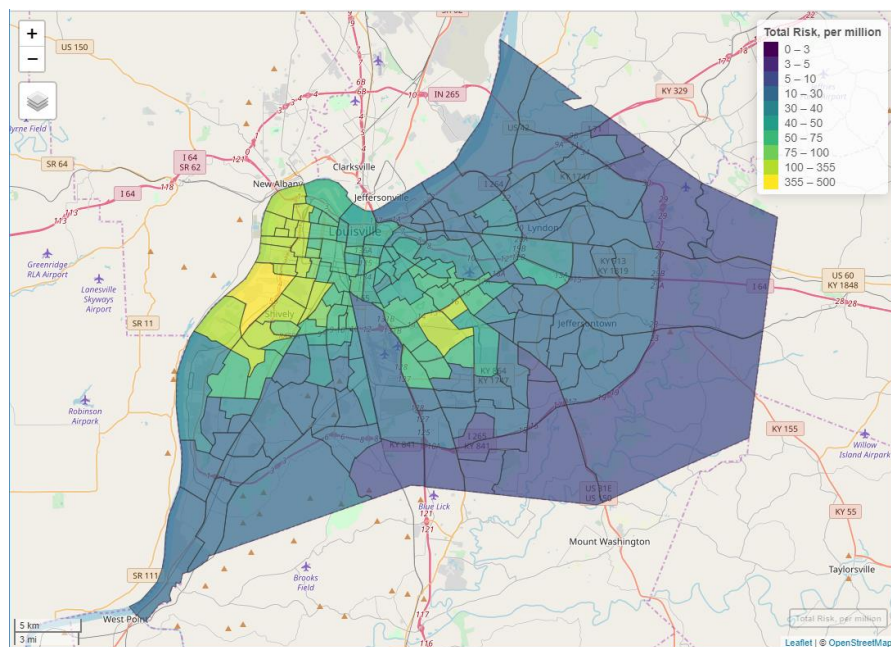
Air Toxics in Louisville

<u>CAS No.</u>	<u>Compound</u>	<u>TAC No.</u>
107-13-1	Acrylonitrile	1
71-43-2	Benzene	1
75-25-2	Bromoform	1
106-99-0	1,3 Butadiene	1
56-23-5	Carbon tetrachloride	1
67-66-3	Chloroform	1
106-46-7	1,4 Dichlorobenzene	1
75-09-2	Methylene chloride (Dichloromethane)	1

<u>CAS No.</u>	<u>Compound</u>	<u>TAC No.</u>
127-18-4	Perchloroethylene (Tetrachloroethylene)	1
79-01-6	Trichloroethylene	1
75-01-4	Vinyl Chloride	1
108-88-3	Toluene	1
100-41-4	Ethylbenzene	2
108-10-1	Methyl isobutyl ketone (4-Methyl- 2-pentanone)	4
100-42-5	Styrene	4
80-62-6	Methyl methacrylate	4
140-88-5	Ehtyl acrylate	4

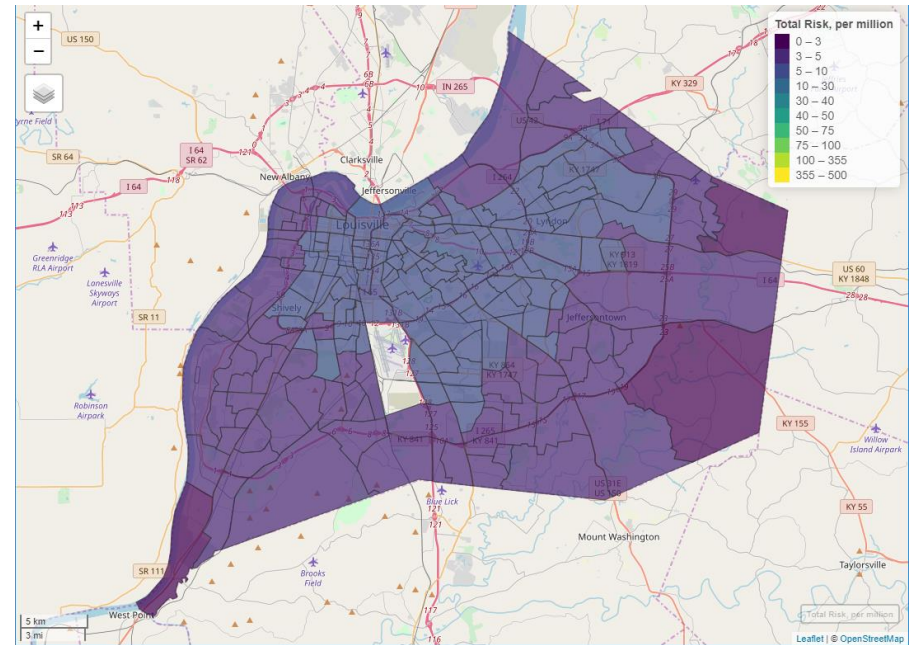
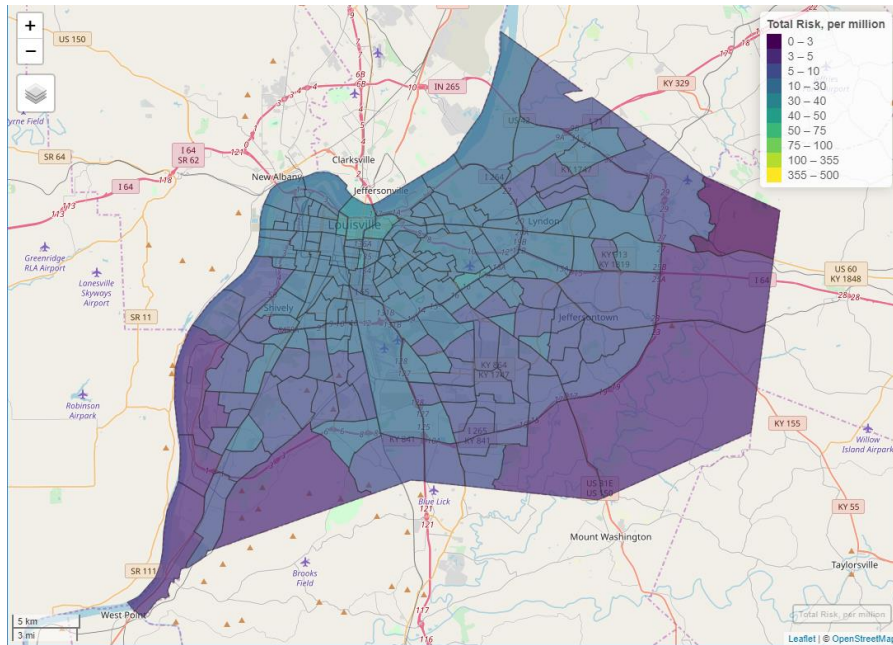
National Air Toxics Assessment

2005 v 2014 – Point Sources



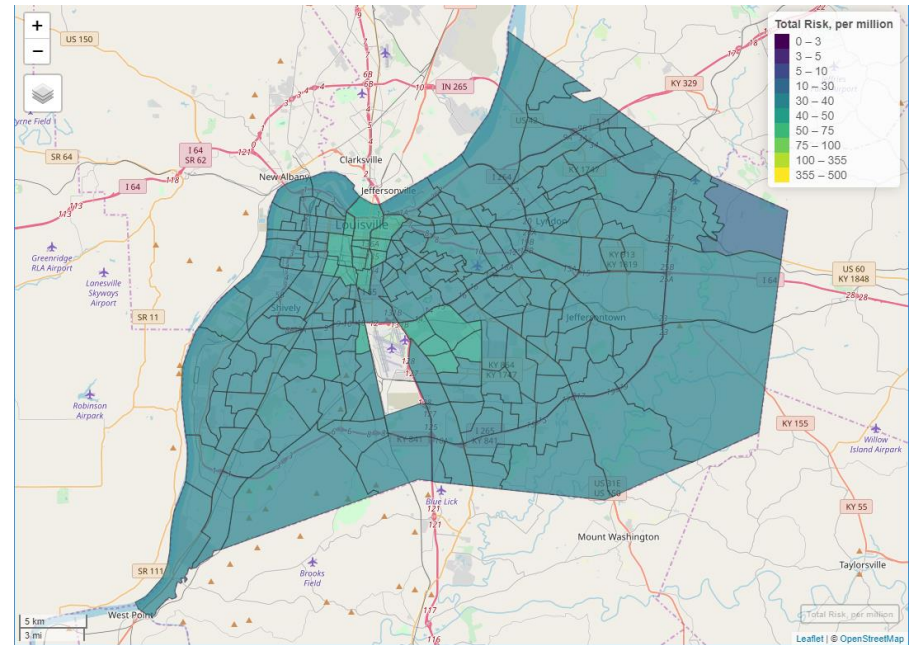
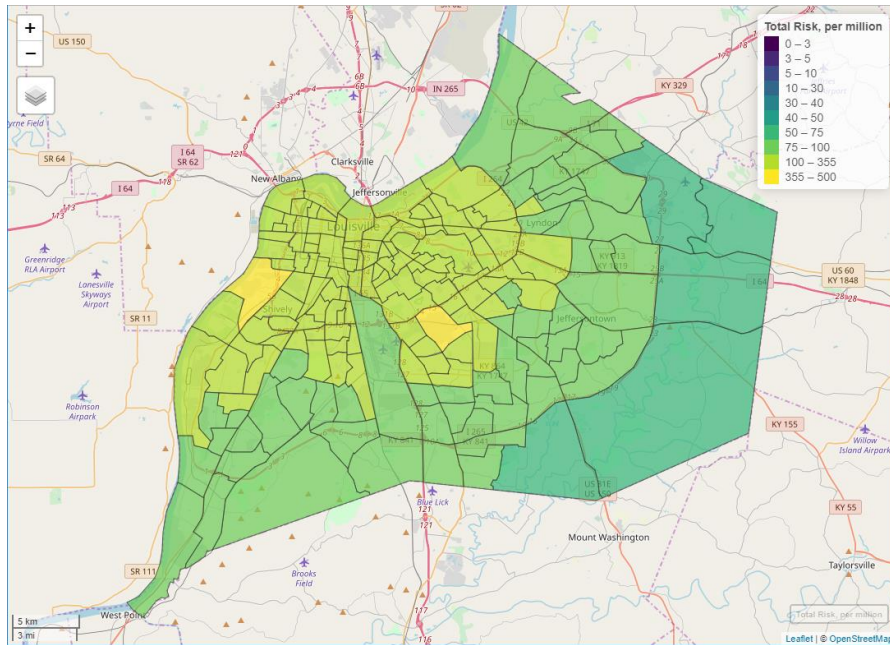
National Air Toxics Assessment

2005 v 2014 – Onroad Sources

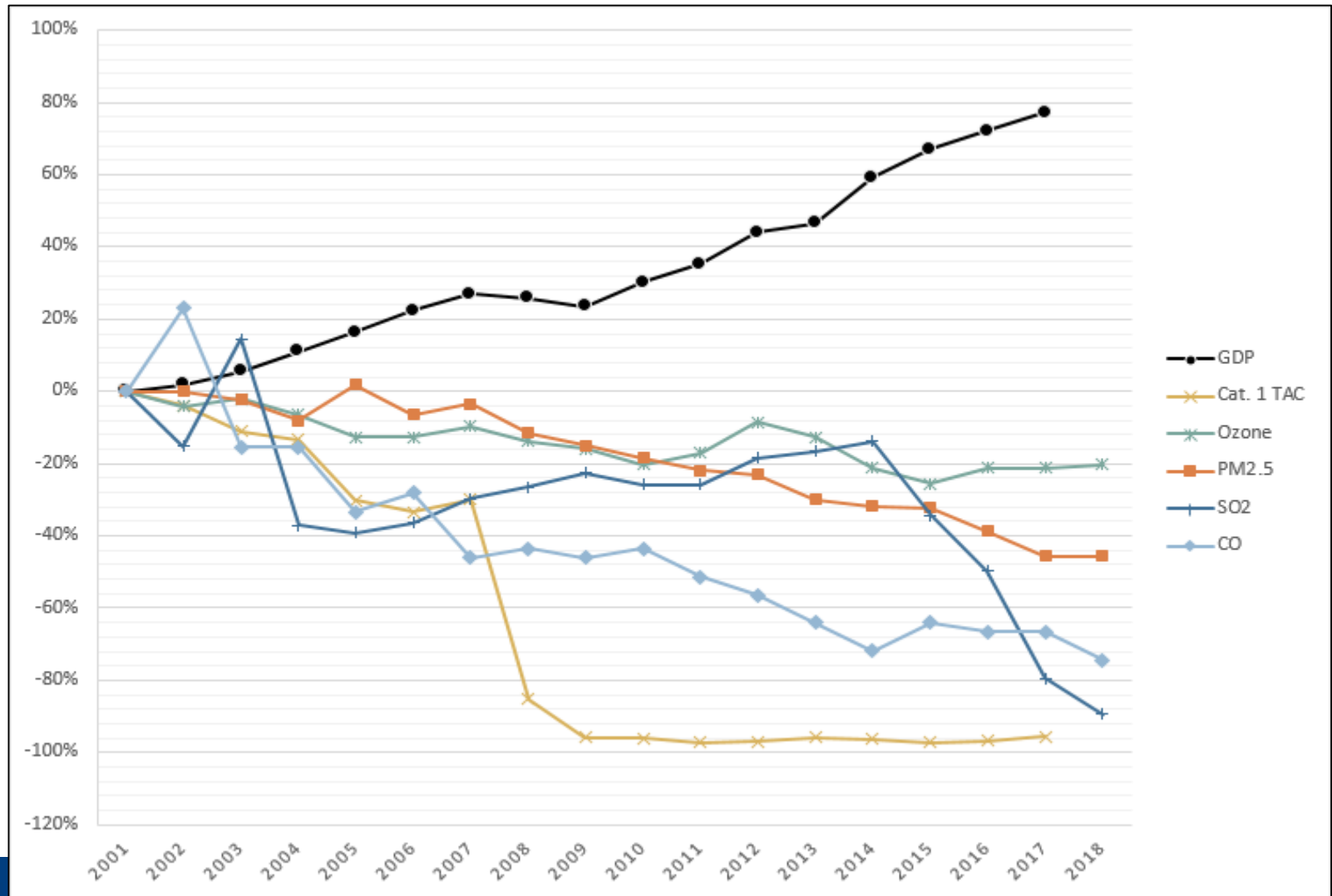


National Air Toxics Assessment

2005 v 2014 – Total



Air Quality in Louisville



Sources of Pollution

- **Mobile Sources**

- Includes **ALL** forms of transportation
 - Automobiles, trucks, tractors, trains, airplanes

- **Stationary and Area Sources**

- Non-moving sources
 - Power plants, industrial facilities, gas stations, paint booths

- **Exposure**

- Proximity to sources can increase exposure
- Transportation can increase exposure



Land Use and Air Quality

Land Development



Urban Sprawl



Infill



Transportation Planning



Land Development and Air Quality

■ Urban Sprawl

- The spreading of urban developments (such as houses and shopping centers) on undeveloped land near a city

■ Air Quality Impact

- Increases the vehicle miles traveled (VMT)
- Can also decrease exposure

■ Infill

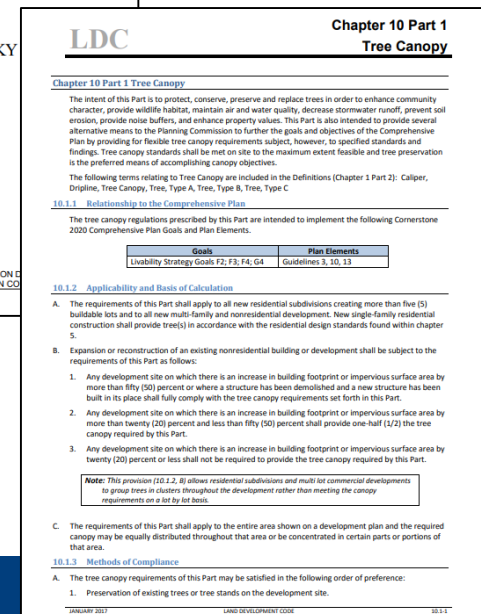
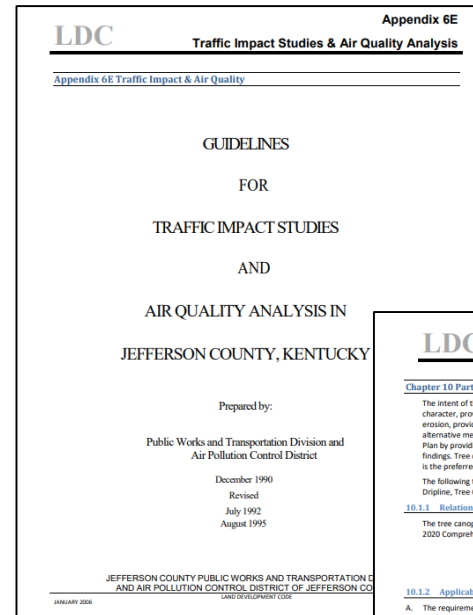
- Makes use of existing infrastructure
- Process of developing vacant or under-utilized existing urban areas that are already largely developed

■ Air Quality Impact

- Can reduce VMT
- Can increase exposure

Land Development Code and Air Quality

- Land Development Code
 - Development Review Process
 - Air Quality Analysis (Performed by APCD)
 - Zoning
 - Tree Canopy



Air Quality Analysis – History

- Basis for this process can be found in **Louisville Metro's Comprehensive Plan**
 - 12th Policy under Goal #1 in Mobility Chapter
 - 31st Policy under Goal #1 in Livability Chapter
- Guidance for process found in Louisville **Metro's Land Development Code (LDC)**
 - [LDC Appendix 6E.II](#)
 - APCD
 - Reviews potential developments
 - Determines if an air quality analysis is warranted based on proposed development's site plan and traffic impact study

Air Quality Analysis – Process

Set of criteria determines if air quality analysis is necessary

Analysis warranted, APCD meets with developer or representative

Developer's team will perform analysis (APCD may also perform analysis to gauge results)

If **NO** NAAQS exceedance found, project may proceed

If exceedance in Carbon Monoxide (CO) **is** found, the developer can review the project to ensure no exceedance occurs

Zoning Process

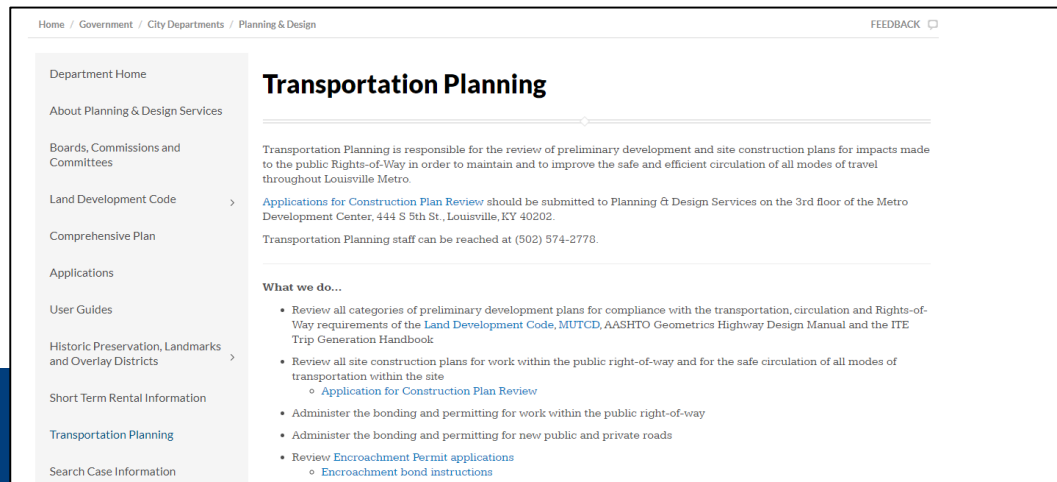
- Zoning determines how land is used
 - Industrial
 - Commercial
 - Residential
 - Transportation
- Provides opportunities for public participation

Application Name	Description	Fee	Application
Conditional Use Permit Pre-Application	A preliminary evaluation of a proposed conditional use permit.	\$150	Word
Conditional Use Permit	*A use permitted in specific locations when certain conditions can be met. A CUP requires approval from the Board of Zoning Adjustment or the Planning Commission when requested in conjunction with a zoning change request. A pre-application is required prior to submitting this application.	\$1,000	Word
	*Bed & breakfast inns and short term rentals	\$500	
	*Accessory apartments, home occupations and duplex dwelling units	*\$300	
Short Term Rental Conditional Use Permit Pre-Application and Formal Application	If a short term rental is desired and the property is zoned TNZD or if the property is not the host's primary residence and it is zoned residential, a Conditional Use Permit is need to operate a short term rental.	Pre-Application: \$150	Word
		Formal Application: \$500	Word

Application Name	Description	Fee	Application
Zoning/Form District Change Pre-Application	A preliminary evaluation of a proposed change in zoning/form district with the comprehensive plan.	\$150	Word
Zoning/Form District Change	An application to change a property's zoning or form district classification. A pre-application is required prior to submitting this application.	Various (see application)	Word
Joint Zoning Change & Subdivision	An application to change a property's zoning or form district classification in conjunction with a proposal for a major subdivision. A zoning change pre-application is required prior to submitting this application.	Various (see application)	Word
TNZD Map Change	An application to change the mapped use within a Traditional Neighborhood Zoning District (TNZD).	Various (see application)	Word

Transportation Planning

- Reviews preliminary development and site construction plans for impacts made to the public Rights-of-Way
- Seeks to maintain and to improve the safe and efficient circulation of all modes of travel throughout Louisville Metro



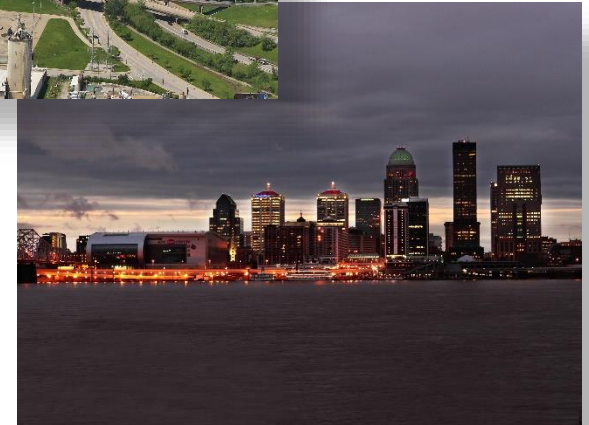
Transportation Planning and Air Quality

- Kentuckiana Regional Planning and Development Agency
 - Transportation Conformity
 - Transportation Plans and TIPs will not:
 - Cause/contribute to new air quality violations
 - Worsen existing violations
 - Delay timely attainment of the relevant NAAQS or any interim milestones

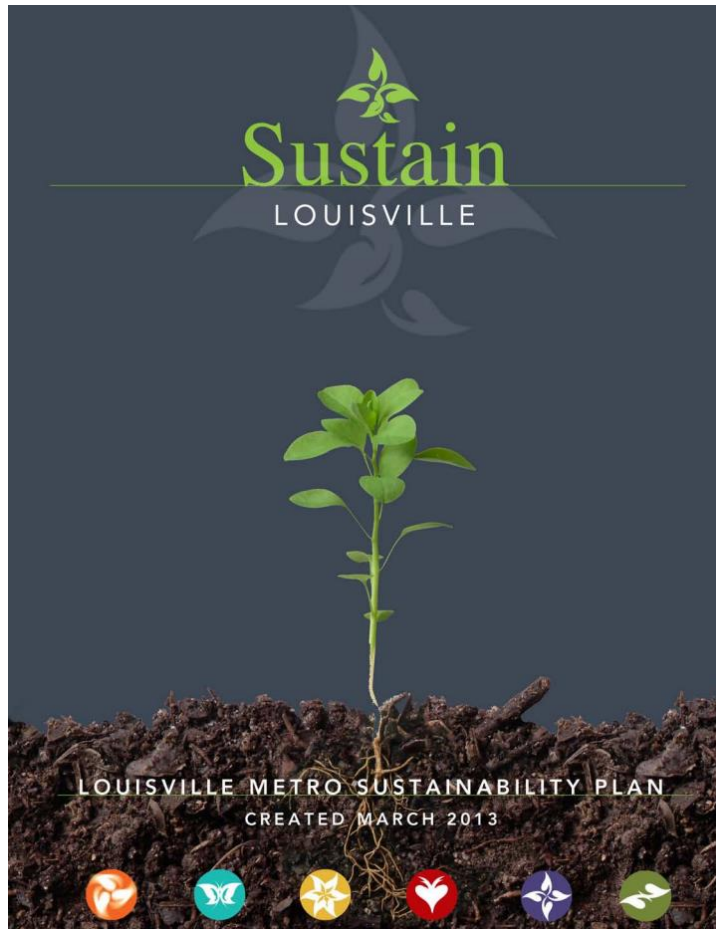


Overview

- Land Use in Louisville
- Air Quality and Land Use Development
- **Improving Louisville's Air Quality**



Sustain Louisville



Goal 3: Transportation

- Decrease transportation-related greenhouse gas emissions 20% by 2020
- Reduce vehicle miles traveled by 20% 2025



Goal 5: Community

- Incorporate sustainability into the Land Development Code and the 2015 Comprehensive Plan

Transportation Planning

- Continue implementing the following initiatives:
 - Move Louisville
 - [Louisville Metro Bike Master Plan](#)
- KIPDA (conformity)



Move Louisville Projects Update The chart below describes each project in the 20-year MOVE Louisville transportation plan, which was revealed in April 2016 and is administered by Louisville Forward's Office of Advanced Planning as well as Public Works. The chart also provides an update on the progress of each project as of June 2019.

Project	What is it?	What are the benefits?	Status
A. East/West Transit Corridors	<ul style="list-style-type: none"> • Cross-town transit route connecting Dixie Highway to Westport Road • Two major routes are proposed, one just inside the Watterson Expressway and one just inside the Snyder Freeway. 	<ul style="list-style-type: none"> • Enhanced cross-town transit routes to better connect residents to jobs 	Routes will be evaluated as part of TARC's Comprehensive Operations Analysis which is currently underway and due to be completed in 2020. TARC recently received a CMAC grant to pilot an East-West route.
B. Transforming Dixie Highway Bus Rapid Transit (BRT)	<ul style="list-style-type: none"> • Improvements to Dixie Highway including a Bus Rapid Transit line, sidewalk enhancements, landscaping and traffic signal upgrades 	<ul style="list-style-type: none"> • Creation of a safer, more efficient and economically successful multimodal corridor 	Construction underway. The new BRT line will be operating by December 2019.
C. Broadway Complete Street Bus Rapid Transit (BRT)	<ul style="list-style-type: none"> • Complete street retrofit of Broadway from Shawnee Park to Baxter Avenue to accommodate Premium Transit Service along with bicycle and pedestrian safety and mobility improvements 	<ul style="list-style-type: none"> • Increased transit frequency, reliability and efficiency • Transit user experience improvements • Enhanced bicycle and pedestrian infrastructure to improve safety, mobility and access to high capacity transit services 	RFP was issued in Nov 2018. A multi-disciplinary consultant team has been chosen and will begin work in June 2019. The plan should take approx. 12-18 months to complete.

Land Development Code

- APCD
 - Continue reviewing potential developments and determine when an air quality analysis is required



- Tree Canopy Regulations
 - Revisions proposed to strengthen Tree Canopy Regs

Greening Initiatives

- Green For Good Project

- Examined how vegetation may be utilized to reduce exposure to traffic pollutants



- Green Heart Project

- Scientific experiment that will test if increasing green space in a neighborhood will improve air quality and human health



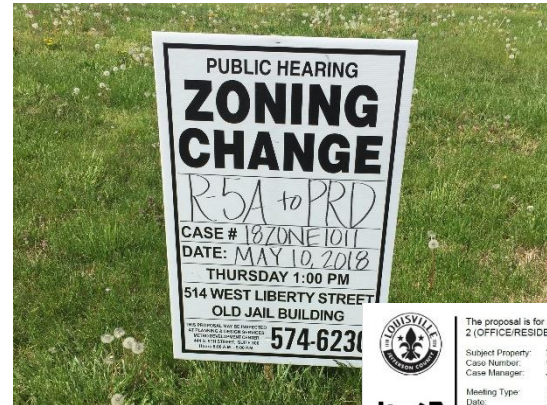
- Trees Louisville

- Tree planting throughout Louisville Metro



Additional Avenues for Public Involvement/Participation

- Board of Zoning Adjustment (BOZA)
- Planning Commission
- Neighborhood Associations
 - Center for Neighborhoods
- Louisville Metro Council



NOTICE OF PUBLIC MEETING

The proposal is for an **AREA WIDE CHANGE IN ZONING** from R-6 (MULTI-FAMILY RESIDENTIAL) and OR-2 (OFFICE/RESIDENTIAL) to C-2 (COMMERCIAL).

Subject Property: 768, 810, & 850 BARRET AVENUE & 1235 E BRECKINRIDGE STREET
Case Number: 19-ZONEPA-0030
Case Manager: JULIA WILLIAMS (julia.williams@louisvilleky.gov)

Meeting Type: NEIGHBORHOOD MEETING
Date: THURSDAY, AUGUST 8, 2019
Time: FROM 6:00PM UNTIL 7:00 PM
Location: HIGHLANDS COMMUNITY MINISTRIES- Community Center 1228 E. Breckinridge Street 40204

To view documents related to this proposal, please visit:
Louisville Metro Planning and Design Services (Hours: 9:00 AM to 5:00 PM)
444 S. 2nd Street, 3rd Floor, Louisville, KY 40202
(502) 574-6230

Search for Records

To search for a address class, enter data into one or more of the fields below. Case numbers since 2007, should be entered in the Record Number field. To search before 2007, enter the address number in the Project Name field. For example, enter 123-456 in the Project Name field to find information for that parcel. Or no number. After you click on the appropriate search result, use the dropdown under Record Info and click on Attachments to view any documents associated with the

General Search

Record Number: Record Type:

Project Name:

Start Date: End Date:

License Type: License Number:

First: Last: Name of Business:

Street No.: Direction: Street Name: Street Type:

City: State: Zip:

Parcel No.:

Resources

Air Pollution Control District

[Louisvilleky.gov/APCD](https://louisvilleky.gov/APCD)

KAIRE

[Helptheair.org](https://helptheair.org)

[Facebook.com/helptheair](https://facebook.com/helptheair)

[Twitter.com/helptheair](https://twitter.com/helptheair)

Lawn Care for Cleaner Air

[Louisvilleky.gov/government/lawn-care-cleaner-air](https://louisvilleky.gov/government/lawn-care-cleaner-air)

Center for Neighborhoods

<https://www.centerforneighborhoods.org>

Louisville Air Watch

[Airqualitymap.louisvilleky.gov/](https://airqualitymap.louisvilleky.gov/)

AirNow

[Airnow.gov/](https://airnow.gov/)

Grow More Mow Less

[Louisvilleky.gov/government/air-pollution-control-district/grow-more-mow-less](https://louisvilleky.gov/government/air-pollution-control-district/grow-more-mow-less)

[Facebook.com/GrowMoreMowLess](https://facebook.com/GrowMoreMowLess)

Louisville Metro Council

<https://louisvilleky.gov/government/metro-council>

Resources

Office of Advanced Planning and Sustainability

<https://louisvilleky.gov/government/advanced-planning>

Office of Planning and Design

<https://louisvilleky.gov/government/planning-design>

Louisville Planning Commission

<https://louisvilleky.gov/government/planning-design/planning-commission>

Comprehensive Plan

<https://louisvilleky.gov/government/planning-design/comprehensive-plan>

Land Development Code

<https://louisvilleky.gov/government/planning-design/land-development-code>

Louisville Board of Zoning Adjustment (BOZA)

<https://louisvilleky.gov/government/planning-design/board-zoning-adjustment>

Questions?

Louisville Metro Air Pollution Control District

701 W. Ormsby Ave.
Ste. 303
Louisville, Ky. 40203

(502) 574-6000

www.louisvilleky.gov/APCD

Keith H. Talley Sr., Director